

AG Contract No. KR01 1436TRN
ADOT ECS File: 01-112
Project No. SPR
TRACS No.: R0402 10P
Research: Compare AC Crude Oil Sources

**AGREEMENT
BETWEEN
THE STATE OF ARIZONA
AND
THE WESTERN RESEARCH INSTITUTE**

THIS AGREEMENT is entered into 19 September 2001, pursuant to Arizona Revised Statutes, Sections 11-951 through 11-954, as amended, between the State of Arizona, acting by and through its DEPARTMENT OF TRANSPORTATION (the "State") and the WESTERN RESEARCH INSTITUTE, acting by and through its duly authorized officer (the "WRI").

I. RECITALS

1. The State is empowered by Arizona Revised Statutes Section 28-401 to enter into this agreement and has by resolution, a copy of which is attached hereto and made a part hereof, resolved to enter into this agreement and has delegated to the undersigned the authority to execute this agreement on behalf of the State.

2. The WRI is empowered to enter into this agreement and has delegated to the undersigned authority to execute this agreement on behalf of the WRI.

3. The State and the WRI desire to conduct research comparing three different asphaltic crude oil sources with three test sections on US-93, generally in accordance with Exhibit A which is attached hereto and made a part hereof, at an estimated total cost of \$49,050 hereinafter referred to as the Project. The State of Arizona has a construction project underway on US-93 and this research work constitutes a change order to the construction project.

THEREFORE, in consideration of the mutual agreements expressed herein, it is agreed as follows:

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II. SCOPE OF WORK

1. The STATE will:

a. Appoint a Project coordinator within the State's Transportation Research Center and the Kingman District to interface with the WRI relating to the research and monitoring.

b. Provide the WRI with information and data as may be reasonably available to assist in the Project research and monitoring.

c. Design and construct three roadway test sections on US-93 for comparison. Contribute approximately \$28,050.00 to the Project.

2. The WRI will:

a. Appoint a Project coordinator at the WRI to interface with the State relating to the research and monitoring.

b. Contribute \$20,500.00 to the Project. Accomplish the research and monitoring generally in accordance with Exhibit A, which is attached hereto and made a part hereof, provide the State with copies of appropriate progress reports that WRI submits to the Federal Highway Administration (FHWA) regarding the work on this project, and a copy of the final report documenting the program, data derived, and the final results. Such reports will be in a format compliant with the Federal Highway Administration guidelines for preparing research reports.

III. MISCELLANEOUS PROVISIONS

1. Title to all documents, reports and other deliverables prepared by the WRI in performance of this agreement shall rest jointly with the State, the Federal Highway Administration (FHWA), and the WRI.

2. This agreement shall become effective upon signature by the parties hereto, and shall remain in force and effect until completion of said Project and reimbursements; provided, however, that this agreement, may be cancelled at any time prior to the commencement of performance under this agreement, upon thirty (30) days written notice to the other party.

3. The parties agree to comply with all applicable state and federal laws, rules, regulations and executive orders governing equal employment opportunity, immigration, nondiscrimination and affirmative action.

4. This agreement may be cancelled in accordance with Arizona Revised Statutes Section 38-511 as regards conflicts of interest on behalf of State employees.

5. The provisions of Arizona Revised Statutes Section 35-214 are applicable to this contract.

6. In the event of any controversy which may arise out of this agreement, the parties hereto agree to abide by required arbitration as is set forth for public works contracts in Arizona Revised Statutes Section 12-1518.

7. All notices or demands upon any party to this agreement relating to the agreement shall be in writing and shall be delivered in person or sent by mail addressed as follows:

Department of Transportation
Joint Project Administration
205 S. 17th Avenue - 616E
Phoenix, AZ 85007

Western Research Institute
365 N. 9th Street
Laramie, WY 82072-3380

IN WITNESS WHEREOF, the parties have executed this agreement the day and year first above written.

WESTERN RESEARCH INSTITUTE

STATE OF ARIZONA

Department of Transportation

By Scott B. Smith
SCOTT B. SMITH, P. E.
Major General, U.S. Army (Retired)
Chief Executive Officer

By William J. Higgins
WILLIAM J. HIGGINS
Deputy State Engineer

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Exhibit A to JPA 01-112

This is a research project sponsored by the Western Research Institute, the Federal Highway Administration, and the Arizona Transportation Research Center. The project consists of incorporating three test sections into the asphalt concrete pavement on the US-93 Boulders Project for future observations and monitoring. The intent is to keep all the asphalt concrete criteria's and specification's the same, while only varying the crude oil source for the asphalt binder.

The test sections will be installed as follows:

- a) Three test sections, with three different crude oil sources.
- b) Each test section will consist of two lifts of asphalt pavement. Both lifts would be constructed of the same asphalt product/crude oil source. Each lift consisting of two pavement strips, side by side, varying in width between 10 feet and 14 feet wide, starting on the shoulders and including the number two travel lane. (Slow vehicle lane).
- c) Each test section would be about 3500 feet long. (Both lifts).

To complete this research project:

The Arizona Department of Transportation (ADOT) agrees to do the following:

- Support this research project and incorporate into the structural pavement of the US-93 Boulders Project.
- Prepare the necessary construction documents and coordinate with the contractor to implement these test sections.
- Pay for the remainder of this research project cost, estimated \$28,550. A change order will be prepared to cover this additional cost; prior approval has been obtained for this change order.

The Western Research Institute (WRI) agrees to do the following:

- Contribute \$20,500 to the State of Arizona toward the cost of this research project. The monetary contribution of WRI to the State of Arizona is limited to this amount and WRI shall not be held liable for any unforeseen circumstances as a result of this research project.
- Provide the names of suppliers capable of delivering the intended crude oil sources for the asphalt binder.
- Performs all necessary asphalt sampling and testing needed for this research project at no cost to ADOT.
- Notify Sam Elters, Resident Engineer at 928-757-7793, and/or James Fountain, Wikieup Maintenance Supervisor at 928-765-2312, of their monitoring work activities two weeks in advance.
- Complete future monitoring activities of this research project at no cost to ADOT; Such monitoring activities may include but is not to be limited to, traffic control, per ADOT Traffic Control Supplement 1996, to obtain fifteen cores from these pavement test sections at the end of the 1st, 2nd, and 5th year after completion.